ABSTRACT

DIFFERENTIAL OSCILLATOR CIRCUIT INCLUDING AN ELECTRO-MECHANICAL RESONATOR

A differential oscillator circuit including first (10) and second (20) branches each including the series arrangement, between high (VDD) and low (VSS) supply potentials, of a transistor (4, 5) and bias means (2, 3, 8, 9) for imposing a determined current through the current terminals of the transistor. The transistors are interconnected so as to form a crossed pair of transistors, the most positive current terminal of each transistor (on the "drain" side) being connected to the control terminal of the other transistor of the crossed pair. This differential oscillator circuit further includes an electro-mechanical resonator (6) connected to the crossed transistor pair on the "drain" side, as well as a capacitive element (7) connected to the crossed transistor pair on the "source" side. The capacitance value of the capacitive element is selected so as to be less than a maximum value above which relaxation of the oscillator circuit can occur and thereby prevent relaxation of the oscillator circuit.